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SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

REPORT OF THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE ON ITS TWELFTH SESSION BONN, 12-16 JUNE 2000

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I. OPENING OF THE SESSION
(Agenda item 1)

9. The twelfth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) was held at the Hotel Maritim, Bonn, Germany from 12 to 16 June 2000.

10. The Chairman of the SBSTA, Mr. Harald Dovland (Norway), opened the session on 12 June 2000. The Chairman welcomed all Parties and Observers to the session. He noted that this twelfth session was an unusual one, as it came after a week of informal meetings and workshops during which in-depth discussions had been held on several issues on the SBSTA agenda. The Chairman remarked that the pre-sessional week had yielded important progress on which the SBSTA should now build in order to pave the way for success at the sixth session of the Conference of the Parties (COP). He emphasized that, for many issues, the aim for the twelfth session of the SBSTA should be to agree on negotiating texts that would prepare the ground for substantive negotiations at the thirteenth sessions of the subsidiary bodies. He concluded by urging Parties to use the limited time available as efficiently as possible.

11. The Executive Secretary conveyed condolences, on behalf of the secretariat, to the delegation of the Syrian Arab Republic for the passing away of President Hafez Al-Assad.

12. The Executive Secretary reported that the Convention had now received a total of 184 instruments of ratification, acceptance, approval or accession, while the number of ratifications or accessions to the Kyoto Protocol had reached 22. He expressed the hope that the informal meetings and workshops held in the pre-sessional week would allow the SBSTA to make significant progress during its twelfth session. He invited feedback from delegates on the organization of the pre-sessional week, which the secretariat would take into consideration when planning the next one, prior to the thirteenth sessions of the subsidiary bodies.

13. A statement was made by the representative of a Party, speaking on behalf of the Group of 77 and China, echoing the Executive Secretary's condolences to the delegation of the Syrian Arab Republic.

14. At the 2nd meeting, held jointly with the Subsidiary Body for Implementation (SBI) on 12 June, general statements were made by representatives of four Parties, including one speaking on behalf of the Group of 77 and China. The chairmen of the subsidiary bodies recalled that informal meetings had been held during the pre-sessional week on joint agenda items, as well as on capacity-building and cross-cutting issues.

II. ORGANIZATIONAL MATTERS
(Agenda item 2)

A. Adoption of the agenda
(Agenda item 2 (a))

15. At its 1st meeting, on 12 June, the SBSTA considered the provisional agenda contained in document FCCC/SBSTA/2000/1.

16. The SBSTA adopted the following agenda:

1. Opening of the session.

2. Organizational matters:

   (a) Adoption of the agenda;
   (b) Organization of the work of the session.

3. Implementation of Article 4.8 and 4.9 of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol).

4. Matters relating to Article 3.14 of the Kyoto Protocol.

5. Procedures and mechanisms relating to compliance under the Kyoto Protocol.

6. Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol.

7. "Best practices" in policies and measures among Parties included in Annex I to the Convention.

8. Methodological issues:

   (a) Land-use, land-use change and forestry;
   (b) Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol;
   (c) Good practice guidance and uncertainty management in national greenhouse gas inventories;
   (d) Methods and tools to evaluate impacts and adaptation;
   (e) Other matters.

9. Development and transfer of technologies:

   (a) Status of the consultative process (decision 4/CP.4);
   (b) Other matters.

10. Cooperation with relevant international organizations.

11. Other matters.

12. Report on the session.

B. Organization of the work of the session
(Agenda item 2 (b))

17. The SBSTA considered this sub-item at its 1st meeting, on 12 June. It had before it the tentative schedule of meetings contained in document FCCC/SBSTA/2000/1, annex III. The Chairman noted that the schedule of meetings should be used as a guide to the organization of work of the SBSTA, but that flexibility would be required to respond to the pace of progress.

III. IMPLEMENTATION OF ARTICLE 4.8 AND 4.9 OF THE CONVENTION (DECISION 3/CP.3 AND ARTICLES 2.3 AND 3.14 OF THE KYOTO PROTOCOL)
(Agenda item 3)

MATTERS RELATING TO ARTICLE 3.14 OF THE KYOTO PROTOCOL
(Agenda item 4)

1. Proceedings

18. The SBSTA considered these items together at its 2nd and 6th meetings, held jointly with the SBI on 12 and 16 June, respectively. It had before it document FCCC/SB/2000/2.

19. Statements were made by representatives of 33 Parties, including one speaking on behalf of the African group, one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

20. At the 2nd meeting, held jointly with the SBI on 12 June, the Chairman of the SBSTA provided a report on the outcome of the workshops mandated by decision 12/CP.5[1] on these items, which were held in Bonn from 9 to 11 March and from 13 to 15 March 2000. Mr. Bo Kjellen (Sweden) and Mr. Mohamad Reza Salamat (Islamic Republic of Iran), Vice-Chairman of the SBI, provided a report on the informal meetings relating to these items, which they had chaired during the pre-sessional week at the request of the chairmen of the subsidiary bodies. The subsidiary bodies agreed to consider these items by way of a joint contact group. The chairmen appointed Mr. Kjellen and Mr. Salamat to co-chair this contact group.

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[1] For the full texts of decisions adopted by the Conference of the Parties at its fifth session, see document FCCC/CP/1999/6/Add.1.

21. The discussions in the contact group covered a wide range of issues and enabled a better understanding of the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and the impact of the implementation of response measures, under Article 4.8 and 4.9 of the Convention. The same contact group also discussed matters related to Article 3.14 of the Kyoto Protocol.

22. The discussions greatly benefited from the report on the two workshops mentioned in paragraph 12 above. In the course of the discussions, delegations were invited to provide inputs. Subsequently, the co-chairs of the contact group presented a consolidated text, based on the discussions, the inputs and the report of the workshops mentioned in paragraph 12 above. In ensuing sessions there were further discussions on the consolidated text.

2. Conclusions

23. At its 6th meeting, held jointly with the SBI on 16 June, having considered a proposal by the chairmen, the SBSTA and the SBI adopted the following conclusions:

(a) The subsidiary bodies considered the report on the two workshops held in Bonn from 9 to 11 March and from 13 to 15 March 2000, and contained in document FCCC/SB/2000/2, and acknowledged the importance of the information provided in the workshops as a valuable input to the work relating to the implementation of Article 4.8 and 4.9 of the Convention, as well as to Articles 2.3 and 3.14 of the Kyoto Protocol;

(b) The subsidiary bodies noted the progress made on addressing the implementation of Article 4.8 and 4.9 of the Convention;

(c) The subsidiary bodies also noted that discussion had commenced on matters relating to Article 3.14 of the Kyoto Protocol;

(d) The subsidiary bodies agreed to forward to their thirteenth sessions the note by the chairmen of the subsidiary bodies (FCCC/SB/2000/5) containing a consolidated text and other inputs from Parties;

(e) The subsidiary bodies invited their chairmen, with the assistance of the secretariat, to develop a text on these issues, on the basis of the consolidated text and other inputs from Parties, as well as comments made in the course of the discussions, to serve as a basis for negotiation at the thirteenth sessions of the subsidiary bodies.

IV. PROCEDURES AND MECHANISMS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL

(Agenda item 5)

1. Proceedings

24. The SBSTA considered this item at its 2nd and 6th meetings, held jointly with the SBI, on 12 and 16 June respectively. It had before it the following documents: FCCC/SB/2000/1 and FCCC/SB/2000/MISC.2 and Corr.1.

25. At the joint meeting on 12 June, Mr. Tuiloma Neroni Slade (Samoa) provided a report on the informal meetings relating to this item, which he had chaired during the pre-sessional week together with Mr. Harald Dovland (Norway), Chairman of the SBSTA, at the request of the chairmen of the subsidiary bodies. The chairmen referred discussion of this item to the Joint Working Group on Compliance (JWG) established by decision 8/CP.4,[2] under the co-chairmanship of Mr. Dovland and Mr. Slade.

26. At the joint meeting on 16 June, Mr. Slade presented the report of the JWG on its work during the twelfth sessions of the subsidiary bodies (FCCC/SB/2000/CRP.3/Rev.1).

2. Conclusions

27. At the joint meeting on 16 June, the SBSTA and the SBI took note of the report of the JWG, and agreed that it would be annexed to the report of the SBI (see FCCC/SBI/2000/5, annex III).

V. MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO PROTOCOL

(Agenda item 6)

1. Proceedings

28. The SBSTA considered this item at its 2nd and 6th meetings, held jointly with the SBI on 12 and 16 June respectively. It had before it the following documents: FCCC/SB/2000/3 and FCCC/SB/2000/MISC.1 and Add.1-2.

29. Statements were made by representatives of 11 Parties, including one speaking on behalf of the Eastern European group, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

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[2] For the full texts of decisions adopted by the Conference of the Parties at its fourth session, see document FCCC/CP/1998/16/Add.1.

30. At the joint meeting on 12 June, a report was provided by Mr. Kok Kee Chow (Malaysia) on the workshop he had chaired relating to this item in the pre-sessional week, at the request of the chairmen of the subsidiary bodies. The subsidiary bodies agreed to consider this item by way of a joint contact group, chaired by Mr. Chow.

2. Conclusions

31. At the joint meeting on 16 June, having considered a proposal by the chairmen, the subsidiary bodies adopted the following conclusions:

(a) The subsidiary bodies considered the note by the chairmen contained in document FCCC/SB/2000/3, submissions by Parties contained in document FCCC/SB/2000/MISC.1 and Add.1-2 and the informal note by the Chairman of the workshop on mechanisms (Bonn, 5-8 June 2000);

(b) The subsidiary bodies noted the progress made in implementing the work programme on mechanisms contained in decision 7/CP.4;

(c) The subsidiary bodies, recalling decision 14/CP.5, agreed to forward to the thirteenth sessions of the subsidiary bodies the note by the chairmen of the subsidiary bodies contained in document FCCC/SB/2000/4, entitled "Consolidated text on principles, modalities, rules and guidelines", as a basis for further negotiations on mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, with priority given to the clean development mechanism, and with a view to the COP taking decisions on all the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol at its sixth session, including, where appropriate, recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;

(d) The subsidiary bodies urged Parties, if they wish to make additional submissions, to do so in succinct, legal language and directly related to the text in document FCCC/SB/2000/4, by 1 August 2000, for inclusion in a miscellaneous document to be issued before the thirteenth sessions of the subsidiary bodies. Submissions received later would be issued at the thirteenth sessions.

VI. "BEST PRACTICES" IN POLICIES AND MEASURES AMONG PARTIES INCLUDED IN ANNEX I TO THE CONVENTION
(Agenda item 7)

1. Proceedings

32. The SBSTA considered this item at its 4th and 7th meetings, on 13 and 16 June respectively. It had before it document FCCC/SBSTA/2000/2.

33. Statements were made by representatives of 13 Parties, including one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

34. At the 4th meeting, on 13 June, the Chairman reported on informal meetings that he had chaired relating to this item during the pre-sessional week. The Chairman invited Mr. José Romero (Switzerland) to assist him in conducting informal consultations on this item.

2. Conclusions

35. At its 7th meeting, on 16 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA took note of the Chairman's report (FCCC/SBSTA/2000/2) on the workshop on "best practices" in policies and measures, held in Copenhagen from 11 to 13 April 2000, requested by decision 8/CP.4, and expressed appreciation to the Governments of Denmark and France for sponsoring this workshop; and

(b) The SBSTA concluded that the workshop had helped Parties to advance the work on sharing experience and the exchange of information regarding "good practices" in policies and measures related to Article 2.1(b) of the Kyoto Protocol. The SBSTA decided to further consider this issue at its thirteenth session.

VII. METHODOLOGICAL ISSUES
(Agenda item 8)

A. Land-use, land-use change and forestry
(Agenda item 8 (a))

1. Proceedings

36. The SBSTA considered this sub-item at its 1st and 5th meetings, on 12 and 15 June respectively. It had before it document FCCC/SBSTA/2000/3.[3] The SBSTA also had before it the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Land-use, Land-use Change and Forestry*.

37. Statements were made by representatives of 27 Parties, including one speaking on behalf of the African group, one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States, and another speaking on behalf of the Group of 77 and China.

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[3] See paragraph 32 (a) below.

38. At the 1st meeting, on 12 June, a statement was made by Dr. Robert Watson, Chairman of the IPCC, introducing the above-mentioned special report. A statement was also made by a representative of the Food and Agriculture Organization of the United Nations (FAO). Mr. Philip Gwage (Uganda) provided a report on the informal meetings relating to this sub-item, which he had co-chaired together with Mr. Halldor Thorgeirsson (Iceland) during the pre-sessional week, at the request of the chairmen of the subsidiary bodies. The SBSTA agreed to consider this sub-item by way of a contact group, co-chaired by Mr. Gwage and Mr. Thorgeirsson.

39. At the 5th meeting, on 15 June, a statement was made by the representative of Italy, offering to host the inter-sessional consultations referred to in subparagraph 32 (h) below.

2. Conclusions

40. At its 5th meeting, on 15 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA took note with appreciation of document FCCC/SBSTA/2000/3. The secretariat was requested to issue a corrigendum to this document to correctly reflect data submitted by New Zealand;

(b) The SBSTA expressed its appreciation to the IPCC for the preparation of the *Special Report on Land-Use, Land-Use Change and Forestry*, for the IPCC special side event on the report, and for the input of the IPCC authors during the pre-sessional week of informal meetings. It requested the secretariat to explore, in collaboration with the IPCC, the possibility of organizing a special briefing on Sunday, 9 July 2000 for non-Annex I Parties participating in the SBSTA workshop in Poznan, Poland;

(c) With reference to the request made by the SBSTA at its eleventh session for submissions on additional activities under Article 3.4 (FCCC/SBSTA/1999/14, para. 46 (f) and (i)), having given initial consideration to criteria and guiding principles put forward by Parties, the SBSTA further requested Parties to indicate how the proposed additional activities relate to the objective and principles of the Convention and its Kyoto Protocol;

(d) The SBSTA agreed to a format for the submission of the country-specific data and information by Annex I Parties (see annex II to this report) called for by the SBSTA at its eleventh session (FCCC/SBSTA/1999/14, para. 46 (g), (h), (i), (j)). It requested Parties to provide their submissions no later than the deadline of 1 August 2000. The formats, and the data and information that will be submitted, by no means prejudge decisions or conclusions that may be made by either the COP or the SBSTA at future sessions. In their submissions, Annex I Parties should complete those portions of tables I and III that directly relate to their preferred proposals. Furthermore, Annex I Parties may provide data and information in relation to other options using tables I and III. The SBSTA decided to consider this data and information at its thirteenth session, in the light of document FCCC/SBSTA/1999/14, paragraph 46 (g), (i) and (k);

(e) The SBSTA requested Parties, in preparing the above-mentioned submissions, to provide textual proposals on Article 3.3, 3.4 and 3.7, and explanatory material to provide the context and rationale of these textual proposals. It invited Parties to take into consideration the guidance given to the Chairman, under subparagraph 32 (f) below, in preparing their submissions;

(f) Considering decision 16/CP.5, the SBSTA requested the Chairman to prepare, with the help of the secretariat, a consolidated synthesis of textual proposals from the above-mentioned submissions, for consideration by Parties at its thirteenth session. This synthesis would be structured according to the elements outlined below:

(i) Proposed definitions and accounting approaches related to afforestation, reforestation and deforestation under Article 3.3;

(ii) How and which additional human-induced activities might be included under Article 3.4, including modalities, rules and guidelines related to these activities and their accounting;

(iii) Methodologies for measuring and reporting in relation to Article 3.3 and 3.4 activities;

(iv) Overall accounting approaches in relation to requirements of Article 3.3, 3.4 and 3.7 and regarding, *inter alia*, reversibility, natural effects, and accounting interlinkages;

(v) Other;

(g) The SBSTA encouraged the organization of regional workshops to enhance participation in future land-use, land-use change and forestry meetings;

(h) The SBSTA invited the Chairman to convene an inter-sessional consultation after its thirteenth session (11-15 September 2000) to assist in undertaking preparatory work for consideration by the COP at its sixth session in relation to decision 16/CP.5, taking into account the need for transparency and regional balance in representation at that meeting;

(i) The SBSTA noted the circumstances surrounding the issues of land-use, land-use change and forestry, particularly the recent availability of the IPCC Special Report and the deadline for submissions on 1 August 2000. The SBSTA recognized that documents for the next sessions may only be available immediately prior to the sessions. It urged Parties to accelerate their consideration of the issue, including the IPCC report, and requested the Chairman to consult widely on the issue.

B. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol

(Agenda item 8 (b))

1. Proceedings

41. The SBSTA considered this sub-item at its 1st and 5th meetings, on 12 and 15 June respectively. It had before it the following documents: FCCC/SBSTA/2000/INF.3, FCCC/SBSTA/2000/INF.5 and Add.1-2, FCCC/SBSTA/2000/INF.7, FCCC/TP/2000/1 and FCCC/SBSTA/2000/MISC.1 and Add.1.

42. Statements were made by representatives of five Parties, including one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

43. At the 1st meeting, on 12 June, a report was provided by Mr. Newton Paciornik (Brazil) on the informal meetings relating to this issue, which he had co-chaired with Ms Helen Plume (New Zealand) during the pre-sessional week, at the request of the chairmen of the subsidiary bodies. The SBSTA agreed to consider this sub-item by way of a contact group co-chaired by Mr. Paciornik and Ms Plume.

2. Conclusions

44. At its 5th meeting, on 15 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA agreed upon guidelines for national systems for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol under Article 5.1 of the Kyoto Protocol (see annex I below), and decided to prepare, at its thirteenth session, a draft decision on this issue to be recommended for adoption by the COP at its sixth session;

(b) The SBSTA recalled the provisions of Article 5.1 of the Kyoto Protocol, which state that each Party included in Annex I shall have in place a national system, no later than one year prior to the start of the first commitment period. The SBSTA advised the SBI to encourage Annex I Parties to establish national systems in accordance with the guidelines under Article 5.1 as soon as possible, with the aim of gaining early experience with their implementation. The SBSTA may consider the possible future revision of these guidelines in accordance with the provision of paragraph 18 of these guidelines and taking into account the relevant experience of Parties;

(c) The SBSTA agreed to consider, at its thirteenth session, guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol, taking into account information contained in document FCCC/SBSTA/2000/INF.5/Add.2 and the views of Parties;

with the aim of recommending such guidelines for adoption by the COP, at its sixth session. The SBSTA recognized that some elements of these guidelines will be further elaborated at a later stage;

(d) The SBSTA requested the secretariat to prepare draft guidelines, for consideration by the SBSTA at its thirteenth session, for the review process under Article 8 of the Kyoto Protocol, taking into account the report of the workshop on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol, held in Bonn from 14 to16 March 2000, contained in document FCCC/SBSTA/2000/INF.5 and Add.2, submissions by Parties and issues raised by Parties during the twelfth session of the SBSTA, including elements of draft guidelines as elaborated by Parties. The SBSTA made this request with the aim of recommending the adoption of guidelines for the review process under Article 8 of the Kyoto Protocol by the COP at its sixth session. The SBSTA recognized that some elements of these guidelines will be further elaborated at a later stage;

(e) The SBSTA agreed to consider, at its thirteenth session, the information related to methodologies for adjustments contained in document FCCC/SBSTA/2000/INF.5/Add.2, and the views of Parties, with the aim of recommending a decision on initial guidance on these methodologies by the COP at its sixth session and initiating a process for further elaborating these methodologies at a later stage. Parties are invited to consider what further methodological work is needed and how such work should proceed, including whether the SBSTA should invite the IPCC National Greenhouse Gas Inventory Programme to develop methods for adjustments;

(f) The SBSTA invited Parties to consider, at its thirteenth session, when the guidelines and guidance to be adopted by the COP at its sixth session, as mentioned in subparagraphs 36 (c) to (e) above, should be further elaborated and compiled. In doing so, Parties are invited to take into account the expected outcome of discussions by Parties on mechanisms under the Kyoto Protocol, compliance, land-use, land-use change and forestry, the results of the trial period for the technical review of greenhouse gas inventories from Annex I Parties in accordance with decision 6/CP.5, and the possible input of the IPCC, as mentioned in subparagraph 36 (e) above;

(g) The SBSTA took note of the information on some aspects related to modalities of accounting for assigned amounts contained in document FCCC/SBSTA/2000/INF.7 and invited Parties to address, at its thirteenth session, the issues raised in this document, including the review of the base year inventories and whether a decision should be taken by the COP, at its sixth session, on this issue. The SBSTA also invited Parties to consider, at its thirteenth session, other aspects of modalities of accounting for assigned amounts;

(h) The SBSTA invited Parties to submit, by 1 August 2000, comments on issues related to Articles 5, 7 and 8, particularly on those issues mentioned in subparagraphs 36 (c) to (g) above. It requested the secretariat to compile these views into a miscellaneous document.

C. Good practice guidance and uncertainty management in national greenhouse gas inventories

(Agenda item 8 (c))

1. Proceedings

45. The SBSTA considered this sub-item at its 1st and 5th meetings, on 12 and 15 June respectively. It had before it the IPCC report, *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*.

46. Statements were made by representatives of 13 Parties, including one speaking on behalf of the European Community and its member States.

47. At the 1st meeting, on 12 June, a statement was made by the Co-Chairman of the IPCC Task Force on National Greenhouse Gas Inventories, on behalf of the Chairman of the IPCC, introducing the above-mentioned report.

2. Conclusions

48. At its 5th meeting, on 15 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA commended the IPCC on its report entitled *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (referred to below as good practice guidance) prepared in response to the request of the SBSTA at its eighth session (FCCC/SBSTA/1998/6, para. 40 (e)). Good practice guidance will assist in preparing higher-quality greenhouse gas inventories in which uncertainties are reduced as far as practicable. Good practice guidance will also support the development of inventories that are transparent, consistent, complete, comparable and accurate;

(b) The SBSTA endorsed the good practice guidance as an elaboration of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and recommended its use in the preparation of national GHG inventories;

(c) The SBSTA concluded that the good practice guidance should be applied by Annex I Parties to the extent possible for inventories due in 2001 and 2002 and should be used for inventories due in 2003 and beyond. Annex I Parties with economies in transition may phase in the good practice guidance two years later than other Annex I Parties;

(d) The SBSTA encouraged non-Annex I Parties to apply good practice guidance, as appropriate and to the extent possible, in the preparation of their GHG inventories. The SBSTA recognized that applying good practice guidance could assist these Parties in developing inventories that better reflect their national circumstances;

(e) The SBSTA invited Annex I Parties to submit information on their experience with using the good practice guidance in preparing their 2001 inventory submission by 15 August 2001, to be considered by the SBSTA at its fifteenth session;

(f) The SBSTA requested the secretariat, in its report to the SBSTA at its fifteenth session on the UNFCCC reporting guidelines on annual inventories, to consider whether any modifications to these guidelines are needed to reflect the good practice guidance;

(g) The SBSTA requested the secretariat, in its report on the technical review trial period in accordance with decision 6/CP.5, to consider the experience and views of Parties with respect to the review of information relating to good practice guidance;

(h) The SBSTA noted that the good practice guidance does not include specific guidance for the land-use change and forestry sector. The SBSTA invited the IPCC to include good practice guidance for that sector in its workplan to be developed following the invitation of the SBSTA at its tenth session (FCCC/SBSTA/1999/6, para. 41 (e));

(i) The SBSTA requested the secretariat, in consultation with the IPCC, to work with other organizations to encourage the translation and wide dissemination of the good practice guidance by appropriate means, particularly among Annex I Parties with economies in transition and non-Annex I Parties. The SBSTA recommended that the good practice guidance should be included as an element in relevant capacity-building activities, particularly of United Nations organizations.

D. Methods and tools to evaluate impacts and adaptation
(Agenda item 8 (d))

1. Proceedings

49. The SBSTA considered this sub-item at its 4th and 7th meetings, on 13 and 16 June respectively. It had before it the following documents: FCCC/SBSTA/2000/INF.4 and FCCC/SBSTA/2000/MISC.5.

50. Statements were made by representatives of 11 Parties, including one speaking on behalf of the Alliance of Small Island States and one speaking on behalf of the European Community and its member States.

2. Conclusions

51. At its 7th meeting, on 16 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA took note of the information provided by the secretariat on the progress made in collecting and disseminating information on the methods and tools to assess climate change impacts and adaptation (FCCC/SBSTA/2000/INF.4). It encouraged the secretariat to continue its work, and noted that further action is needed to improve the quality of information, and to enhance the capability of developing country Parties to make the best use of available methods and tools;

(b) The SBSTA requested the secretariat, in coordination with the IPCC, to organize a meeting of experts to explore:

(i) Options to improve the compilation and review, and to facilitate the dissemination, of information on methodologies, including development of an extended compendium of methods and tools;

(ii) The feasibility of a joint workshop on impacts and adaptation methodologies after the Working Group II Third Assessment Report of the IPCC is approved/accepted.

(c) The SBSTA invited the secretariat to provide information on the results of the expert meeting mentioned in subparagraph 43 (b) above, if possible, at its thirteenth session;

(d) The SBSTA requested the secretariat to prepare a report for its fourteenth session on methodological issues regarding climate change impacts and adaptation as related to the UNFCCC, taking into consideration information provided in the above-mentioned Third Assessment Report of the IPCC;

(e) The SBSTA noted that exchange of information and the ability to apply impact and adaptation methods is linked to the issue of capacity-building in vulnerability and adaptation assessment. The SBSTA invited Parties to consider needs and options related to capacity-building in the area of methodologies for impacts and adaptation, as an element of a draft framework for capacity-building activities, in accordance with decisions 10/CP.5 and 11/CP.5.

E. Other matters
(Agenda item 8 (e))

1. Proceedings

52. The SBSTA considered this sub-item at its 4th meeting, on 13 June.

53. The Chairman noted that a matter requiring the attention of the SBSTA under this agenda sub-item was the question of emissions resulting from fuel used for international transportation,

in particular cooperation with the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

54. The secretariat made a statement indicating that the UNFCCC has been admitted as an observer to the meetings of the Committee on Aviation Environment Protection of ICAO and that it is being invited to, and is participating in, relevant meetings of IMO. Written reports from ICAO and IMO were made available to the SBSTA.

2. Conclusions

55. The SBSTA took note of the information provided by the secretariat regarding emissions resulting from fuel used for international transportation, in particular cooperation with ICAO and IMO. The SBSTA took note with appreciation of written progress reports provided by ICAO and IMO on their activities regarding greenhouse gas emissions from aviation and shipping.

VIII. DEVELOPMENT AND TRANSFER OF TECHNOLOGIES
(Agenda item 9)

A. Status of the consultative process (decision 4/CP.4)
(Agenda item 9 (a))

1. Proceedings

56. The SBSTA considered this sub-item at its 3rd and 5th meetings, on 13 and15 June respectively. It had before it the following documents: FCCC/SBSTA/2000/4, FCCC/SBSTA/2000/INF.2, FCCC/SBSTA/2000/INF.6 and FCCC/SB/2000/MISC.2. The SBSTA also had before it the IPCC *Special Report on Methodological and Technological Issues in Technology Transfer*.

57. Statements were made by representatives of 17 Parties, including one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

58. At the 3rd meeting, on 13 June, the Co-Chair of IPCC Working Group III made a statement introducing the above-mentioned special report. A representative of the Climate Technology Initiative of the International Energy Agency also made a statement. The Chairman of the SBSTA provided a report on informal meetings that he had convened relating to this sub-item during the pre-sessional week. The Chairman announced his intention to continue the meetings of the previously established informal group of "Friends of the Chair" in order to advance the consultative process. He also informed the SBSTA of his intention to convene a contact group on the development and transfer of technologies, at the thirteenth session.

59. At the 5th meeting, on 15 June, the Chairman informed the SBSTA that he had consulted with a number of Parties and agreed to invite Mr. Oladapo Afolabi (Nigeria) and Ms Jean Cooper (Canada) to co-chair the contact group. He stated that he looked forward to working with the co-chairs in preparation for, and at, the thirteenth session.

2. Conclusions

60. At its 5th meeting, on 15 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA noted with appreciation the successful completion of the three regional workshops on the transfer of technology consultative process and the large and diverse number of ideas they generated, as contained in the workshop reports (FCCC/SBSTA/1999/11, FCCC/SBSTA/2000/INF.2, FCCC/SBSTA/2000/INF.6) and as summarized in the note by the Chairman on possible elements of a framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention (FCCC/SBSTA/2000/4);

(b) The SBSTA noted the excellent assistance provided by the governments of the United Republic of Tanzania, the Philippines and El Salvador in hosting each regional workshop; the financial contributions and/or in-kind support by the Governments of Australia, Austria, Canada, Finland, France, Germany, Japan, the Netherlands and the United States of America; and the useful inputs from the two regional joint industry seminars organized by the Climate Technology Initiative, in cooperation with the secretariat, in Asia and the Pacific and Latin America and the Caribbean;

(c) The SBSTA noted the statement made by the Co-Chair of Working Group III of the IPCC and welcomed the publication of the IPCC *Special Report on Methodological and Technological Issues in Technology Transfer;*

(d) The SBSTA invited the Parties to submit their views, by 30 June 2000, on a framework for implementation of meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention. That invitation replaced the earlier invitation, made at the eleventh session, for submission by 15 July 2000 (FCCC/SBSTA/1999/14, para. 75 (i));

(e) The SBSTA recalled its request to the Chairman, made during the eleventh session, to make available at the thirteenth session of the SBSTA a report on the outcome of the consultative process, incorporating a draft text on a framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention (FCCC/SBSTA/1999/14, para. 75 (k)). It further requested the Chairman, with the assistance of the secretariat, in preparing such a report, to take into account the information identified in subparagraph 52 (a) above, the submissions from Parties and the IPCC *Special Report on Methodological and Technological Issues in Technology Transfer*;

(f) The SBSTA noted the progress made in the development of the secretariat's technology web pages in cooperation with the Climate Technology Initiative and the Government of the United States. It requested the secretariat to continue with these cooperative efforts and to make further information available on its web site;

(g) The SBSTA noted the progress made by the secretariat on developing a pilot project on a technology cooperation project inventory including both mitigation and adaptation technologies. It requested the secretariat to provide information at its thirteenth session on the resource implications of continuing this work at different levels of effort.

B. Other matters
(Agenda item 9 (b))

1. Proceedings

61. The SBSTA considered this sub-item at its 3rd and 5th meetings, on 13 and 15 June respectively.

62. At the 3rd meeting, on 13 June, a statement was made by the Co-Chair of IPCC Working Group I on the applicability of regional climate models at the scale of small island States.

2. Conclusions

63. At its 5th meeting, on 15 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA noted with appreciation the oral report by the Co-Chair of Working Group I of the IPCC on the applicability of regional climate models at the scale of small island States, and the report made available to the SBSTA by the Hadley Centre for Climate Prediction and Research, United Kingdom, on *Regional Climate Predictions for National Vulnerability Assessments: Capacity-Building in Developing Countries*;[4]

(b) The SBSTA noted that regional models are being developed and applied for use at the scale of small island States and that there is significant potential for the further development and application of such tools in the future. The SBSTA further noted that state-of-the-art regional climate models are critical tools for planning for adaptation to climate change and its effects;

(c) The SBSTA invited the Co-Chairs of Working Group I of the IPCC to make further information available, at its fourteenth session, on the status of regional climate

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[4] Further information and copies of this report can be obtained from gjjenkins@meto.gov.uk.

modelling for different regions of the world, including information on the human and technological capacities necessary to further develop and apply regional climate models, where appropriate.

IX. COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS
(Agenda item 10)

1. Proceedings

64. The SBSTA considered this item at its 3rd and 7th meetings, on 13 and 16 June respectively.

65. Statements were made by representatives of nine Parties.

66. At the 3rd meeting, on 13 June, statements were made by the Chairman of the IPCC and by the Director of the Global Climate Observing System (GCOS). Statements were also made by representatives of the World Health Organization (WHO), the Ramsar Convention and the United Nations Development Programme (UNDP).

2. Conclusions

67. At its 7th meeting, on 16 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA welcomed the statement made by the Chairman of the IPCC on the status of preparation of the Third Assessment Report and key conclusions from the special report on emission scenarios. It noted the progress made in the preparation of the Third Assessment Report, and expressed appreciation to the IPCC for organizing a number of informative side events and presentations of special reports, as well as for its valuable contribution to the official SBSTA meetings;

(b) The SBSTA urged Parties and organizations in a position to do so to continue their financial support to the IPCC, to enable it to complete the Third Assessment Report in a timely manner. It also urged Parties to ensure the scientific integrity of the IPCC process;

(c) The SBSTA welcomed the report made by the Director of the GCOS secretariat, on behalf of the agencies participating in the Climate Agenda, on progress in responding to decision 5/CP.5 and on recent developments in the global observing systems;

(d) The SBSTA noted the efforts already made by the GCOS secretariat to organize regional workshops in the South Pacific and Africa to identify priority capacity-building needs of developing countries related to their participation in systematic observation. The SBSTA

expressed appreciation to those Parties and organizations which provided support to the workshops;

(e) The SBSTA welcomed the information provided by the GCOS secretariat in response to the invitation contained in decision 5/CP.5, to consider the need for an intergovernmental process for global observing systems. It noted the recommendation that no new intergovernmental mechanism is needed at this time, but that the existing intergovernmental mechanisms, including those available to GCOS and its partners, should be used more efficiently;

(f) The SBSTA invited the GCOS secretariat to report periodically on its activities related to decision 5/CP.5, as well as on developments in the global observing systems for climate at its further sessions. It noted the appeal for additional resources by the GCOS secretariat. The SBSTA urged Parties to contribute financial support to the work of the GCOS secretariat to enable it to continue its activities, in response to decision 5/CP.5;

(g) The SBSTA welcomed the cooperation between the secretariat and United Nations bodies and other conventions. It noted with appreciation the reports by representatives of the WHO, the Ramsar Convention, and the UNDP;

(h) The SBSTA requested the secretariat to continue to explore areas of cooperation on substantive matters with these and other United Nations agencies and conventions, and to inform it at subsequent sessions of progress achieved.

X. OTHER MATTERS
(Agenda item 11)

1. Proceedings

68. The SBSTA considered this item at its 4th and 7th meetings, on 13 and 16 June respectively.

69. At the 4th meeting, on 13 June, the Chairman noted that an issue requiring the attention of the SBSTA under this item was that of education, training and public awareness under Article 6 of the Convention. On this issue, the SBSTA had before it documents FCCC/SBSTA/2000/MISC.3 and Add.1.

70. Statements on education, training and public awareness under Article 6 of the Convention were made by representatives of ten Parties.

71. At the same meeting, the SBSTA heard a report from the secretariat summarizing points made by Parties and including suggestions for possible next steps to advance the implementation

of Article 6 of the Convention. The secretariat also provided the SBSTA with a report on the status of the roster of experts.

2. Conclusions

72. At its 7th meeting, on 16 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA noted with appreciation that the issue of education, training and public awareness under Article 6 of the Convention had been taken up at the current session. It thanked the secretariat for its report and welcomed its initiative in organizing a side event at this session, aimed at exchanging information among Parties, intergovernmental organizations and non-governmental organizations;

(b) The SBSTA noted that, although activities related to Article 6 are widely recognized as important in implementing Article 6 of the Convention, the issue has so far received little attention from the SBSTA. The SBSTA also noted that work at the national and international levels has already been undertaken by Parties, intergovernmental organizations and non-governmental organizations, and that the lessons learned, including information products, should now be compiled and shared, and priority areas identified. In addition, the SBSTA took note of the submissions by Parties contained in document FCCC/SBSTA/2000/MISC.3 and Add.1;

(c) The SBSTA requested the secretariat to put Article 6 on the agenda of its fourteenth session and, where appropriate, subsequent sessions.

XI. REPORT ON THE SESSION
(Agenda item 12)

73. At its 7th meeting, on 16 June, the SBSTA considered the draft report on its twelfth session (FCCC/SBSTA/2000/L.1).

74. Statements were made by representatives of two Parties concerning the draft conclusions under agenda item 8 (e), relating to emissions resulting from fuel used for international transportation, in particular cooperation with ICAO and IMO.

75. At the same meeting, on a proposal by the Chairman, the SBSTA authorized the Rapporteur, with the assistance of the secretariat, to complete the report on the session, under the guidance of the Chairman.

XII. CLOSURE OF THE SESSION

76. At the final joint meeting of the SBSTA and the SBI, on 16 June, the Chairman of the SBI recalled that informal consultations had been held on capacity-building throughout the session, and that the issue would be on the provisional agenda of the subsidiary bodies for their thirteenth sessions.

77. At the same joint meeting, the chairmen of the subsidiary bodies recalled that at the first joint meeting on 12 June, Burkina Faso, supported by many other countries, had called for the subsidiary bodies to formally express sympathy and solidarity with the Government and peoples of southern Africa, particularly with Mozambique, where a cyclone had brought devastation and great loss of life. In response to this call, and having considered a proposal by the chairmen, the subsidiary bodies recommended a draft resolution on solidarity with southern African countries, particularly with Mozambique, to the Conference of the Parties for adoption at its sixth session (see FCCC/SBI/2000/5, annex II). The chairmen of the subsidiary bodies urged Parties to give immediate effect to the provisions of the draft resolution, including the call for technical and financial assistance to affected countries, pending its formal adoption.

78. On the adoption of the recommendation of the draft resolution, a statement was made by the representative of Mozambique thanking the subsidiary bodies for their expression of solidarity.

79. At the same joint meeting, closing statements were made by representatives of 17 Parties, including one speaking on behalf of the African group, one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China. The Chairman of the SBI provided information to the subsidiary bodies on the schedule for inter-sessional work prior to COP 6.

80. At the 7th meeting of the SBSTA, on 16 June, a closing statement was made by the representative of a Party.

Annex I

GUIDELINES FOR NATIONAL SYSTEMS FOR THE ESTIMATION OF ANTHROPOGENIC GREENHOUSE GAS EMISSIONS BY SOURCES AND REMOVALS BY SINKS UNDER ARTICLE 5.1 OF THE KYOTO PROTOCOL[1]

I. APPLICABILITY

1. The application of these provisions is mandatory, except for those expressed in non-mandatory language. Parties' implementation of national system requirements may differ according to national circumstances, but shall include the elements described in these guidelines. Any differences in implementation shall not impair the performance of the functions described in these guidelines.

II. DEFINITIONS

A. Definition of national system

2. A national system includes all institutional, legal and procedural arrangements made within a Party included in Annex I to the Convention (Annex I Party) for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and for reporting and archiving inventory information.

B. Other definitions

3. The meaning of the following terms in these guidelines for national systems[2] is the same as in the glossary of the Intergovernmental Panel on Climate Change (IPCC) good practice guidance,[3] accepted by the IPCC at its XVI Plenary:[4]

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[1] All articles referred to in these guidelines are those of the Kyoto Protocol. For the sake of brevity, the Kyoto Protocol is not specified after each article.

[2] The guidelines for national systems for the estimation of anthropogenic greenhouse gas emissions by sources and removals by sinks under Article 5.1 of the Kyoto Protocol are referred to as "guidelines for national systems" in this document.

[3] The IPCC "*Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*" is referred to as the "IPCC good practice guidance" in these guidelines for national systems.

[4] Montreal, 1-8 May 2000.

(a) Good practice is a set of procedures intended to ensure that greenhouse gas inventories are accurate in the sense that they are systematically neither over- nor underestimated as far as can be judged, and that uncertainties are reduced as far as possible. Good practice covers choice of estimation methods appropriate to national circumstances, quality assurance and quality control at the national level, quantification of uncertainties, and data archiving and reporting to promote transparency;

(b) Quality control (QC) is a system of routine technical activities to measure and control the quality of the inventory as it is being developed. The QC system is designed to:

(i) Provide routine and consistent checks to ensure data integrity, correctness and completeness;
(ii) Identify and address errors and omissions;
(iii) Document and archive inventory material and record all QC activities.

QC activities include general methods such as accuracy checks on data acquisition and calculations and the use of approved standardized procedures for emission calculations, measurements, estimating uncertainties, archiving information and reporting. Higher tier QC activities also include technical reviews of source categories, activity and emission factor data and methods;

(c) Quality assurance (QA) activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation development process, to verify that data quality objectives were met, ensure that the inventory represents the best possible estimate of emissions and sinks given the current state of scientific knowledge and data available, and support the effectiveness of the QC programme;

(d) Key source category is one that is prioritized within the national inventory because its estimate has a significant influence on a country's total inventory of direct greenhouse gases in terms of the absolute level of emissions, the trend in emissions, or both;

(e) Decision tree is a flow-chart describing the specific ordered steps which need to be followed to develop an inventory or an inventory component in accordance with the principles of good practice.

4. Recalculation, consistent with the UNFCCC reporting guidelines on annual inventories,[5] is a procedure for re-estimating anthropogenic greenhouse gas (GHG)[6] emissions by sources and

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[5] FCCC/CP/1999/7.

[6] References to greenhouse gases (GHGs) in these guidelines for national systems refer to GHGs not controlled by the Montreal Protocol.

removals by sinks of previously submitted inventories[7] as a consequence of changes in methodologies, changes in the manner in which emission factors and activity data are obtained and used, or the inclusion of new source and sink categories.

III. OBJECTIVES

5. The objectives of national systems under Article 5.1 for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, referred to below as national systems, are:

(a) To enable Annex I Parties to estimate anthropogenic GHG emissions by sources and removals by sinks, as required by Article 5, and to report these emissions by sources and removals by sinks in accordance with Article 7.1 and relevant decisions of the Conference of the Parties (COP) and/or the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP);

(b) To assist Annex I Parties in meeting their commitments under Articles 3 and 7;

(c) To facilitate the review of the information submitted under Article 7 by Annex I Parties, as required by Article 8;

(d) To assist Annex I Parties to ensure and improve the quality of their inventories.

IV. CHARACTERISTICS

6. National systems should be designed and operated to ensure the transparency, consistency, comparability, completeness and accuracy of inventories as defined in the guidelines for the preparation of inventories by Annex I Parties, in accordance with relevant decisions of the COP and/or COP/MOP.

7. National systems should be designed and operated to ensure the quality of the inventory through planning, preparation and management of inventory activities. Inventory activities include collecting activity data, selecting methods and emission factors appropriately, estimating anthropogenic GHG emissions by sources and removals by sinks, implementing uncertainty assessment and quality assurance/quality control (QA/QC) activities, and carrying out procedures for the verification of the inventory data at the national level, as described in these guidelines for national systems.

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[7] "National GHG inventories" are referred to simply as "inventories" in these guidelines for the sake of brevity.

8 National systems should be designed and operated to support compliance with Kyoto Protocol commitments related to the estimation of anthropogenic GHG emissions by sources and removals by sinks.

9. National systems should be designed and operated to enable Annex I Parties to consistently estimate anthropogenic emissions by all sources and removals by all sinks of all GHGs, as covered by the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories and IPCC good practice guidance, in accordance with relevant decisions of the COP and/or COP/MOP.

V. GENERAL FUNCTIONS

10. In the implementation of its national system, each Annex I Party shall:

(a) Establish and maintain the institutional, legal and procedural arrangements necessary to perform the functions defined in these guidelines for national systems, as appropriate, between the government agencies and other entities responsible for the performance of all functions defined in these guidelines;

(b) Ensure sufficient capacity for timely performance of the functions defined in these guidelines for national systems, including data collection for estimating anthropogenic GHG emissions by sources and removals by sinks and arrangements for technical competence of the staff involved in the inventory development process;

(c) Designate a single national entity with overall responsibility for the national inventory;

(d) Prepare national annual inventories and supplementary information in a timely manner in accordance with Articles 5, 7.1 and 7.2 and relevant decisions of the COP and/or COP/MOP;

(e) Provide information necessary to meet the reporting requirements defined in the guidelines under Article 7 in accordance with the relevant decisions of the COP and/or COP/MOP.

VI. SPECIFIC FUNCTIONS

11. In order to meet the objectives and perform the general functions described above, each Annex I Party shall undertake specific functions related to inventory planning, preparation and management.[8]

A. Inventory planning

12. As part of its inventory planning, each Annex I Party shall:

(a) Designate a single national entity with overall responsibility for the national inventory;

(b) Make available the postal and electronic addresses of the national entity responsible for the inventory;

(c) Define and allocate specific responsibilities in the inventory development process, including those related to choice of methods, data collection, particularly activity data and emission factors from statistical services and other entities, processing and archiving, and QC and QA. This definition shall specify the roles of, and cooperation between, government agencies and other entities involved in the preparation of the inventory, as well as the institutional, legal and procedural arrangements made to prepare the inventory;

(d) Elaborate an inventory QA/QC plan which describes specific QC procedures to be implemented during the inventory development process, facilitate the overall QA procedures to be conducted, to the extent possible, on the entire inventory and establish quality objectives;

(e) Establish processes for the official consideration and approval of the inventory, including any recalculations, prior to its submission and to respond to any issues raised by the inventory review process under Article 8.

13. As part of its inventory planning, each Annex I Party should consider ways to improve the quality of activity data, emission factors, methods and other relevant technical elements of inventories. Information obtained from the implementation of the QA/QC programme, the review process under Article 8 and other reviews should be considered in the development and/or revision of the QA/QC plan and the quality objectives.

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[8] For the purpose of these guidelines for national systems, the inventory development process encompasses inventory planning, preparation and management. These steps of the inventory development process are considered in these guidelines only in order to clearly identify the functions to be performed by the national systems, as described in paragraphs 12 to 17 below.

B. Inventory preparation

14. As part of its inventory preparation, each Annex I Party shall:

(a) Identify key source categories following the methods described in the IPCC good practice guidance (chapter 7, section 7.2);

(b) Prepare estimates in accordance with the methods described in the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, as elaborated by the IPCC good practice guidance, and ensure that appropriate methods are used to estimate emissions from key source categories;

(c) Collect sufficient activity data, process information, and emission factors as are necessary to support the methods selected for estimating anthropogenic GHG emissions by sources and removals by sinks;

(d) Make a quantitative estimate of inventory uncertainty for each source category and for the inventory in total, following the IPCC good practice guidance;

(e) Ensure that any recalculations of previously submitted estimates of anthropogenic GHG emissions by sources and removals by sinks are prepared in accordance with the IPCC good practice guidance and relevant decisions of the COP and/or COP/MOP;

(f) Compile the national inventory in accordance with Article 7.1 and relevant decisions of the COP and/or COP/MOP;

(g) Implement general inventory QC procedures (tier 1) in accordance with its QA/QC plan following the IPCC good practice guidance.

15. As part of its inventory preparation, each Annex I Party should:

(a) Apply source category specific QC procedures (tier 2) for key source categories and for those individual source categories in which significant methodological and/or data revisions have occurred, in accordance with the IPCC good practice guidance;

(b) Provide for a basic review of the inventory by personnel that have not been involved in the inventory development, preferably an independent third party, before the submission of the inventory, in accordance with the planned QA procedures referred to in paragraph 12 (d) above;

(c) Provide for a more extensive review of the inventory for key source categories, as well as source categories where significant changes in methods or data have been made;

(d) Based on the reviews described in paragraph 15 (b) and (c) and periodic internal evaluations of the inventory preparation process, re-evaluate the inventory planning process in order to meet the established quality objectives referred to in paragraph 12 (d).

C. Inventory management

16. As part of its inventory management, each Annex I Party shall:

(a) Archive inventory information for each year in accordance with relevant decisions of the COP and/or COP/MOP. This information shall include all disaggregated emission factors, activity data, and documentation about how these factors and data have been generated and aggregated for the preparation of the inventory. This information shall also include internal documentation on QA/QC procedures, external and internal reviews, documentation on annual key sources and key source identification and planned inventory improvements;

(b) Provide review teams under Article 8 with access to all archived information used by the Party to prepare the inventory, in accordance with relevant decisions of the COP and/or COP/MOP;

(c) Respond to requests for clarifying inventory information resulting from the different stages of the review process of the inventory information, and information on the national system, in a timely manner in accordance with Article 8.

17. As part of its inventory management, each Annex I Party should make the archived information accessible by collecting and gathering it at a single location.

VII. ADOPTION AND UPDATING OF THE GUIDELINES

18. These guidelines for national systems shall be adopted, reviewed and revised, as appropriate, according to the decisions of the COP/MOP, taking into account any relevant decisions of the COP.

Annex II

FORMATS FOR THE SUBMISSION DUE ON 1 AUGUST 2000 OF PRELIMINARY, COUNTRY-SPECIFIC DATA AND INFORMATION BY ANNEX I PARTIES FOR PROPOSALS RELATED TO ARTICLE 3.3 AND 3.4 OF THE KYOTO PROTOCOL

This annex provides formats for the submission due on 1 August 2000 of preliminary, country-specific data and information on proposals by Annex I Parties for activities related to Article 3.3 and 3.4 of the Kyoto Protocol. These formats, together with any rules, modalities or guidelines adopted for this annex, or the data and information that will be submitted by Parties using this annex, by no means prejudge decisions or conclusions that may be made by either the Conference of the Parties (COP) or the Subsidiary Body for Scientific and Technological Advice (SBSTA) at future sessions.

The terms and abbreviations used throughout this annex refer to the definitions given in the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Land-Use, Land-Use Change and Forestry* in table 3-1, on pages 130-131 (definitional scenarios) and the section "Land-Based versus Activity-Based Accounting" on pages 130-131 (accounting approaches). For example, the abbreviation "FAO" refers to a definitional scenario where: "A forest refers to a land that has, or will have because of continued growth, more than 10% canopy cover; deforestation is a decline of canopy cover to below 10%, but excludes changes within the forest class; reforestation is artificial establishment of forest on lands that had them previously (including regeneration post-harvest); afforestation is artificial establishment of forest on lands that were not historically forest."

When completing the annex, Parties may modify the definitional scenarios or accounting approaches or use country-specific definitions or approaches. In such cases where the definitions or approaches deviate from those provided by the IPCC Special Report, this should be clearly stated and the applied definitions and/or approaches must be explained in the explanatory text that must accompany each table.

In its submission the Annex I Party should complete those portions of tables I and III that directly relate to its preferred proposals. Furthermore, the Annex I Parties may provide data and information in relation to other options using tables I and III.

Table 1 - Preliminary data and information provided by Annex I Party on carbon stock changes and areas related to Article 3.3 activities

Article 3.3 Country specific data	Definitions	Accounting framework	a_I (ha)	ΔC_I (t C)	a_{II} (ha)	ΔC_{II} (t C)	a_{cp} (ha)	ΔC_{cp} (t C)	Methods and approaches	Data sources, data quality, and uncertainty (e.g. ranges)	Other information relevant to decision-making
Afforestation Reforestation	IPCC	Activity based									
		Land based									
Afforestation	FAO	Activity based									
		Land based									
Reforestation	FAO	Activity based									
		Land based I									
		Land based II									
Afforestation Reforestation	Other	Activity based									
		Land based									
Deforestation	IPCC/FAO	Activity based									
		Land based									
	Other	Activity based									
		Land based									

a_I Area (ha) afforested and reforested, or deforested since 1990 up to 1995 or possibly an earlier specific year.
ΔC_I Carbon stock change (t C) since 1990 up to the same year as used in a_I on land afforested, reforested, and deforested.
a_{II} Area (ha) afforested and reforested, or deforested since 1990 up to 1999 or an earlier specific year.
ΔC_{II} Carbon stock change (t C) since 1990 up to the same year as used in a_{II} on land afforested, reforested, and deforested.
a_{cp} Projected area (ha) afforested and reforested, or deforested since 1990 up to 2012.
ΔC_{cp} Projected carbon stock change (t C) over the first commitment period on land afforested, reforested, and deforested since 1990 up to 2012.

Methods and approaches
Specify:
a) Forest definition used;
b) Definitions for afforestation, reforestation and deforestation used;
c) Applied accounting approaches;
d) Included carbon pools;
e) Other.

EXPLANATORY TEXT (table 1)

Parties should submit information under all headings listed below where the information is relevant to the approach taken in their submission and to the extent that data and methodologies exist.

1. Definitions and accounting:
   a) Forest,
   b) Afforestation, reforestation, and deforestation,
   c) Accounting approaches.

2. Carbon pools included (e.g. above-ground biomass, litter and woody debris, below-ground biomass, soil carbon, and harvested materials);

3. Stratification (e.g. biomes and regions);

4. Methodologies and data:
   a) Data sources,
   b) Sampling techniques,
   c) Models and key parameters,
   d) Uncertainties.

5. Treatment of non-CO_2 greenhouse gases.

6. Methods and key assumptions in projections for the first commitment period (2008–2012) and discussion, if possible, of trends beyond the first commitment period.

Table II - Preliminary data and information provided by Annex I Party on carbon stocks and area estimates (First sentence of Article 3.4)

Land system	*Area (ha)*	*Carbon stock in 1990 (t C)*
Forest lands		
Agriculture lands		
Rangelands/grasslands		
Wetland/tundra		
Other		
Total (as listed above)		

EXPLANATORY TEXT (table II)

Parties should submit information under all headings listed below where the information is relevant to the approach taken in their submission and to the extent that data and methodologies exist.

1. Description of land categories, including any land categories not covered.

2. Carbon pools - distinctions and assumptions.

3. Data sources.

4. Methods.

5. Possible changes in carbon stocks.

6. Uncertainties.

Table III - Preliminary data and information provided by Annex I Party on Article 3.4 activities, related net GHG emissions, involved areas, and projected carbon stock changes (additional activities under Article 3.4)

Article 3.4 Country specific data	Accounting framework	a_i (ha)	$CO_{2,i}$ (t CO_2)*	$CH_{4,i}$ (t CO_2 equiv.)*[1]	$N_2O_{,i}$ (t CO_2 equiv.)*[1]	a_{ii} (ha)	$CO_{2,ii}$ (t CO_2)*	$CH_{4,ii}$ (t CO_2 equiv.)*[1]	$N_2O_{,ii}$ (t CO_2 equiv.)*[1]	a_{cp} (ha)	ΔC_{cp} (t C)	$CO_{2,cp}$ (t CO_2)*	$CH_{4,cp}$ (t CO_2 equiv.)*[1]	$N_2O_{,cp}$ (t CO_2 equiv.)*[1]	Methods and approaches	Data sources, data quality, and uncertainties (e.g. ranges)	Other information relevant to decision-making
Activity 1	Land based																
	Activity based																
Activity 2	Land based																
	Activity based																
Activity 3	Land based																
	Activity based																

* These columns would contain the sum over the years concerned of net annual emissions by sources and removals by sinks for the Article 3.4 activities proposed.
A negative sign indicates either emissions by sources or a decrease in carbon stocks. A positive sign indicates either removals by sinks or an increase in carbon stocks.
To convert a carbon amount to CO_2 multiply it by 3.67.
[1] CH_4 and N_2O emissions are converted to CO_2 equivalent emissions by using the global warming potential (GWP) values of 21 for CH_4 and 310 for N_2O (Source: Second Assessment Report of the IPCC, 1995)

a_i Area (ha) in 1995 or possibly an earlier specific year involved in the Article 3.4 activity since 1990.
$CO_{2,i}$ Net CO_2 emissions (t CO_2) by sources and removals by sinks related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i.
$CH_{4,i}$ CH_4 emissions (t CO_2 equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i
$N_2O_{,i}$ N_2O emissions (t CO_2 equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i.
a_{ii} Area (ha) in 1999 or possibly an earlier specific year involved in the Article 3.4 activity since 1990.
$CO_{2,ii}$ Net CO_2 emissions (t CO_2) by sources and removals by sinks related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_{ii}.
$CH_{4,ii}$ CH_4 emissions (t CO_2 equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_{ii}.

$N_2O_{,ii}$ N_2O emissions (t CO_2 equivalent) by sources related to the Article 3.4 activity, accumulated from 1990

to the same year as used in a_0.

a_{cp} Projected area (ha) in 2012 involved in the Article 3.4 activity since 1990.

ΔC_{cp} Projected carbon stock changes (t C) over the first commitment period related to the Article 3.4 activity since 1990.

CO_{2_cp} Projected net CO_2 emissions related contribution (t CO_2) of the Article 3.4 activity to the first commitment period assigned amount of the Party.

CH_{4_cp} Projected CH_4 emissions related contribution (t CO_2 equivalent) of the Article 3.4 activity to the first commitment period assigned amount of the Party.

$N_2O_{_cp}$ Projected N_2O emissions related contribution (t CO_2 equivalent) of the Article 3.4 activity to the first commitment period assigned amount of the Party.

Methods and approaches

Specify: a) Whether the definition of activity is considered broad or narrow (cf. Section 4.3.2. page 195 of the IPCC Special Report);
b) How the estimates were computed;
c) Other.

EXPLANATORY TEXT (table III)

Parties should submit information under all headings listed below where the information is relevant to the approach taken in their submissions and to the extent that data and methodologies exist.

1. Activities and accounting:
   a) Definitions and descriptions of all activities proposed,
   b) Scope of activities and how they fit into broader managed land categories,
   c) Accounting approaches,
   d) Proposals for key accounting features, e.g. assumptions on baselines, basis for the area estimates covered by activity.
2. Carbon pools included (e.g. above ground biomass, litter and woody debris, below-ground biomass, soil carbon, and harvested materials).
3. Methodologies and data:
   a) Data sources,
   b) Sampling techniques,
   c) Models and key parameters,
   d) Uncertainties.
4. Treatment of non CO_2 greenhouse gases.
5. Methods and key assumptions in projections for the first commitment period (2008–2012) and discussion, if possible, of trends beyond the first commitment period.

Annex III

LIST OF DOCUMENTS BEFORE THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE AT ITS TWELFTH SESSION

FCCC/SBSTA/1999/14	Report of the Subsidiary Body for Scientific and Technological Advice on its eleventh session, Bonn, 25 October - 5 November 1999
FCCC/SBSTA/2000/1	Provisional agenda and annotations. Note by the Executive Secretary
FCCC/SBSTA/2000/2	"Best practices" in policies and measures among Parties included in Annex I to the Convention. Workshop on "best practices" in policies and measures. Note by the Chairman of the Subsidiary Body for Scientific and Technological Advice
FCCC/SBSTA/2000/3	Methodological issues. Land-use, land-use change and forestry. Synthesis report on national greenhouse gas information reported by Annex I Parties for the land-use change and forestry sector and agricultural soils category
FCCC/SBSTA/2000/4	Development and transfer of technologies. Status of the consultative process (decision 4/CP.4). Possible elements of a framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention. Note by the Chairman
FCCC/SBSTA/2000/INF.1	Other matters. Report of the workshop on the new UNFCCC reporting guidelines on annual inventories and options to address challenges facing Annex I Parties with economies in transition in preparing greenhouse gas inventories
FCCC/SBSTA/2000/INF.2	Development and transfer of technologies. Status of the consultative process (decision 4/CP.4). Report of the Asia and the Pacific regional workshop on the transfer of technology consultative process, Cebu, the Philippines, 17-19 January 2000. Note by the Chairman
FCCC/SBSTA/2000/INF.3	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Experience of Annex I Parties with existing national systems for preparing greenhouse gas inventories

FCCC/SBSTA/2000/INF.4	Methodological issues. Methods and tools to evaluate impacts and adaptation. Information on impacts and adaptation assessment methods. Progress report
FCCC/SBSTA/2000/INF.5	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Report of a workshop on issues related to Articles 5, 7 and 8 of the Kyoto Protocol
FCCC/SBSTA/2000/INF.5/Add.1	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Report of a workshop on issues related to Articles 5, 7 and 8 of the Kyoto Protocol. Addendum. Second draft of the guidelines for national systems under Article 5.1 of the Kyoto Protocol
FCCC/SBSTA/2000/INF.5/Add.2	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Report of a workshop on issues related to Articles 5, 7 and 8 of the Kyoto Protocol. Addendum. Elements of Articles 7 and 8 and methodologies for adjustments under Article 5.2
FCCC/SBSTA/2000/INF.6	Development and transfer of technologies. Status of the consultative process (decision 4/CP.4). Report of the Latin America and the Caribbean regional workshop on the transfer of technology consultative process, San Salvador, El Salvador, 29-31 March 2000. Note by the Chairman
FCCC/SBSTA/2000/INF.7	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Modalities for the accounting of assigned amounts. Preliminary assigned amounts
FCCC/SBSTA/2000/MISC.1 and Add.1	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Views from Parties on national systems, adjustments and guidelines under Articles 5, 7 and 8 of the Kyoto Protocol. Submissions from Parties
FCCC/SBSTA/2000/MISC.2	Development and transfer of technologies. Status of the consultative process (decision 4/CP.4). Submissions from Parties
FCCC/SBSTA/2000/MISC.3 and Add.1	Other matters. Article 6 of the Convention: education, training and public awareness. Submissions from Parties
FCCC/SBSTA/2000/MISC.5	Methodological issues. Methods and tools to evaluate impacts and adaptation. Submissions from Parties

FCCC/SB/2000/1	Procedures and mechanisms relating to compliance under the Kyoto Protocol. Note by the co-Chairmen of the Joint Working Group on Compliance
FCCC/SB/2000/2	Implementation of Article 4.8 and 4.9 of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol). Note by the chairmen of the subsidiary bodies
FCCC/SB/2000/3	Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol. Text for further negotiation on principles, modalities, rules and guidelines. Note by the chairmen
FCCC/SB/2000/MISC. 1 and Add.1-2	Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol. Principles, modalities, rules and guidelines for the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol. Submissions from Parties
FCCC/SB/2000/MISC.2 and Corr.1	Procedures and mechanisms relating to compliance under the Kyoto Protocol. Submissions from Parties
FCCC/TP/2000/1	Preliminary options for methodologies to apply adjustments under Article 5.2 of the Kyoto Protocol. Technical paper
FCCC/SBSTA/2000/L.1	Report on the session. Draft report of the Subsidiary Body for Scientific and Technological Advice on its twelfth session
FCCC/SBSTA/2000/L.2	Methodological issues. Guidelines under Articles 5, 7 and 8 of the Kyoto Protocol
FCCC/SBSTA/2000/L.3	Methodological issues. Good practice guidance and uncertainty management in national greenhouse gas inventories
FCCC/SBSTA/2000/L.4	Development and transfer of technologies. Other matters

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